

XIX. *Descriptions of New Phytophaga from Western Australia.* By the Rev. HAMLET CLARK, M.A., F.L.S.

[Read 1st May and 5th June, 1865.]

IN laying before the Society a paper containing descriptions of certain new species of *Phytophaga* from Western Australia, I desire to offer a few remarks on Entomological papers generally—their object, their legitimate scope, and their value.

I will begin with what is a self-evident proposition; that papers, like those which are honoured by a place in our Transactions, may be of the greatest importance to the cause of science; or they may be to its very serious injury—and this latter even when the writers have a real aptitude for and are thoroughly conscientious in their self-imposed studies.

Papers are really valuable when—and indeed only to the degree to which—the information which they supply (its accuracy, its completeness) is sufficient to outweigh the labour that will be required on the part of future students in order to obtain access to them, and to master their contents; for it is well to remember that the author of the most perfect paper in the world is not only by writing it undertaking work himself, but he is most certainly making future work for others; the more he can save the time of others the more useful is his work—the more his paper taxes the time of others the less profitable is his work: this simple fact, if we admit it, at once suggests one aspect which gives in part the measurement of the value of any paper, as an addition to Entomological literature: its limit and scope should be clear and well defined, and within that limit it should be, as far as its subject will permit, exhaustive: it may comprehend a genus, or a group of genera; or it may comprehend a country or a continent: but it should comprehend something, and be limited to something, and within that range it should aim at being as perfect as time and material will allow. I will grant that there is a great charm in being able to wander at will over a vast domain; to describe from one continent a beautiful species; from another continent to seek to fix a striking form as a new genus; to travel from one group to another—from the old world right across to the new—and all within the limits of a few pages! But what infinite labour is all

this causing to future students! or rather, I would say, how great is the risk that some future student, either by accident or indolence, may ignore part of the contents of such a paper altogether. The husbandman who marks out a small portion of unreclaimed land, and then brings the whole of that portion under cultivation, is doing far better work than he who fearlessly charges at the whole sweep of country up to the very horizon; the labour of the former will bear fruit long after the very name of the latter has been forgotten.

And it is worthy of notice, that that which most permanently benefits science is that which also contributes most renown to the writer himself. He who has thoroughly mastered one single point will certainly stand out among us more clearly than he who has ranged over a hundred points and mastered none; to do little, and make that little available for others, is far better than to do much and to add infinitely to the labours of others. It is not the happy possessor of a collection—crowded though it may be in types, or most ample in material—whose name will be most esteemed by our successors; for collections pass away from hand to hand, and leave behind them hardly the name of him to whom they have been the care of years: it is not necessarily even the irrepressible writer, who has added a hundred papers to our literature; it is indeed certain that such a man has been industrious, but it does not by any means follow that that industry has been wisely applied. He rather will be spoken of as excellent, who—it may be with small opportunities—it may be with less brilliant talent than that of many others—has in his studies kept always before him a sense of the vastness of the range of Natural Science; a desire to benefit others, rather than to amuse himself; and hence a resolution to touch nothing that he cannot complete.

I offer these remarks as a preface to a very unpretending paper, with no sort of intention of criticizing any papers published by the Society, except my own; but because I desire that our literary efforts, which will hereafter give the character to ourselves, may not suffer when compared with those of others; and because I am conscious myself of an absolute proneness to the failing to which I refer—a tendency to discursiveness in Entomological work.

The following descriptions of insects represent part of a very interesting little collection of West Australian Phytophaga, which has been placed in my hands by Mr. Du Boulay. Mr. Du Boulay's

method of entomologizing has been this: he rides some score miles every day through the bush; he provides himself with a strong canvas bag, which generally in his gallops is dragging behind him—very much I imagine after the manner of a dredging-net at a yacht's stern in a ten-knots' breeze. At opportune moments during the day this bag is examined; its apex is found crammed with insect life; three or four of the largest and most striking specimens are selected; the rest are tossed away, and the gallop resumed. I have reason to know that for the future our friend, who is really as keen an Entomologist and as true a lover of nature as any one I know, will take better care of the residuum of the contents of his sweeping-net. He excused himself to me for his natural-selection tendencies by stating that he believed that he was the only one in Australia or Europe who was sufficiently advanced to care for such things. Mr. Du Boulay, on his return to West Australia, will be envied by many of us as having it within his power to explore an almost unknown and most interesting Entomological Fauna.

*List of new Species hereinafter described.*

CHRYSOMELIDÆ. *Paropsis*, seventeen species; see tabular analysis below.

*Chalcolampra undulatipennis.*

*laticollis.*

*Australica æneonitens.*

*Chalcomela subpunctata.*

EUMOLPIDÆ. *Geloptera Duboulaii.*

*nodosa.*

*Thaumastomerus viridis.*

*Edusa aureoviridis.*

*setosa.*

*hispidula.*

*nigro-ænea.*

*Ocnus viridis.*

Fam. CHRYSOMELIDÆ.

GENUS PAROPSIS, Oliv.

The species of *Paropsis* described in this paper may be tabulated as follows:—

[1.] Corpore ovato, depresso.

(1) *P. mediocittata.*

(2) *P. apicata.*

[II.] Corpore brevi, subrotundato, satis gibboso.

[A.] Elytris lævibus.

1. Elytris striato-punctatis.

(a) Elytris rufo-fulvis, vel testaceis.

(3) *P. amœna*.

(4) *P. captiosa*.

(5) *P. maculicollis*.

(b) Elytris maculatis.

(6) *P. purpureo-aurea*.

(7) *P. tessellata*.

(8) *P. nigroconsersa*.

(9) *P. sanguineotincta*.

(10) *P. transversomaculata*.

(11) *P. intertincta*.

(c) Elytris nigris.

(12) *P. nigrītula*.

2. Elytris confuse punctatis.

(13) *P. nigropicta*.

[B.] Elytris rugosis, vel subtuberculatis.

(a) Elytris concoloribus (punctis ipsis forsitan tinctis).

(14) *P. incurva*.

(15) *P. perparvula*.

(b) Elytris maculatis, vel aliter tinctis.

(16) *P. nervosa*.

(17) *P. verrucipennis*.

### 1. *Paropsis mediovitata*.

Elongato-ovalis, depressa, striato-punctata, rufo-flava, suturâ latè fulvo-rufâ : *caput* crebrè punctatum, vel rufo-flavum vel testaceum ; *thorax* transversus, basi subsinuatâ, lateribus rotundatis, versus apicem contractis, marginatis, angulis anticis haud prominentibus ; crebrè sed minutè punctatus, ad latera puncta profundiora ; *scutellum* subelongatum, lateribus subrotundatis, impunctatum, nitidum ; *elytra* apice attenuata, depressa, punctato-striata, punctis minutis æqualibus ordinatis, interstitia subtiliter punctata ; rufo-flava, vitta media rufo-fulva apud suturam utrinque strias duas amplectens, apex ipse quoque rufo-fulvus ; *corpus subtus*, *pedes* et *antennæ* flavo-testacei.

Long. corp. lin. 4—2 $\frac{3}{4}$  ; lat. lin. 2 $\frac{1}{2}$ —2.

*P. mediovitata* belongs to that sub-section of this large genus, which includes those species that have elongated and flattened

bodies ; it is closely allied in form to *P. scaphoides*, Baly (ined.), which also I have received from Western Australia.

In Mr. Baly's Collection as well as in my own.

### 2. *Paropsis apicata.*

E minutis, depressa, ovalis, punctato-striata, flava, in exemplo desiccato ad scutellum et apicem sanguineo-notata : *caput* crebrè punctatum, rufo-flavum, labro ad medium fusco-notato ; *thorax* vix triplo longitudinem latitudine superans, margine antico angulato-emarginato, pòstico sinuato, transverso, angulis anticis breviter rotundatis ; confertim et inæqualiter punctatus, punctis versus latera majoribus ; flavus, vel rufo-flavus, margine antico tenuiter rufo-fusco, et dorso medio obscure rufo ; *scutellum* triangulare, impunctatum, rufo-flavum ; *elytra* lata, depressa, apice rotundata, striato-punctata, punctis crebris minutis, interstitiis minute punctatis et versus apicem elevatis ; margines utrinque minutè et confusè punctati ; quoad colorem (in exemplo unico desiccato) flava, apice late et regione scutellari sanguineis, color autem flavus incertus et adumbratus est, interdum fusco ambigue notatus ; *corpus subtus* flavum, abdomine fuscato ; *pedes* flavi, genibus et tarsis rufo-flavis : *antennæ* rufo-fuscæ, apice subincrassatæ.

Long. corp. lin. 2 ; lat. lin.  $1\frac{1}{5}$ .

A single example from which the above description is taken suggests, by its appearance, that the living insect may be quite different in colour, and probably of singular beauty ; it will be recognised from all species of a similar size by the well-pronounced coloration of the apex and its somewhat less distinct triangular post-scutellary marking.

### 3. *Paropsis amœna.*

Lata, circularis, depressa, striato-punctata, pallide flava, sanguineo-colorata : *caput* antice sinuato-transversè foveolatum, crebrè punctatum, flavum, labro rufo-flavo, medio fusco-tincto ; *thorax* penitus longitudinem latitudine triplo superans, angulis anticis prominulis et obtusis, posticis rotundatis, latera rotundata et tenuè marginata, margine anteriori valdè excavato et marginato ; valde punctatus, crebrius ad latera, utrinque ad latera latè impressus, rufo-flavus, flavo-notatus, notis tribus longitudinalibus, apud apicem medium

connexis, mediâ rectâ, lateralibus valde sinuatis; margines etiam obscure flavi; *scutellum* elongato-triangulare, læve, impunctatum, rufo-flavum, medio flavo; *elytra* ampliata, satis depressa, apice rotundata, striato-punctata, punctis crebris minutis et ordinatis, interstitia subtilissime punctata et rugosa, margines ampliati et confuse et fortiter punctati; flavo-sanguineo omnino tincta, marginibus exceptis flavis; *corpus subtus* et *pedes* pallide flavi; *antennæ* fuscæ, articulis 1—4 flavis.

Long. corp. lin.  $3\frac{1}{2}$ ; lat. lin. 3.

It is possible that the sanguineous coloration of the elytra may be in some examples absent. The species may be distinguished by its almost circular and depressed form, and the regular even and minute punctuation of its elytra.

Champion Bay.

#### 4. *Paropsis captiosa*.

Lata, subcircularis, post medium paulum ampliata, vix depressa, humeris utrinque subtuberculatis, striato-punctata, pallide flava: *caput* ad labrum transversè et subcirculariter foveolatum, crebrè punctatum, pallide testaceum, labro ad medium nigro-tincto, et maculâ utrinque nigrâ minutâ apud basin; *thorax* longitudinem mediam latitudine plus duplo superans, angulis anticis obtusis distinctis, lateribus marginatis et rotundatis, angulis posticis rotundatis; indistincte sed ad latera crebrius et fortius punctatus; *scutellum* elongato-triangulare, impunctatum, læve; *elytra* lata, post medium ampliata, apice breviter rotundata; juxta humeros utrinque oblique visos tuberculum breve apparet; striato-punctata, punctis ordinatis confertis et minutis, interstitia vix lævia sed minutissime punctata vel rugosa, (striæ ad latera et ad apicem paulum profundæ videntur, haud ut in *P. amœnâ* obsoletæ et læves), margines ampliati et fortiter punctati; *corpus subtus* et *pedes* flavi; *antennæ* fuscæ, articulis basalibus rufo-testaceis.

Long. corp. lin.  $3\frac{1}{2}$ ; lat. lin. 3.

*P. captiosa* is nearly allied to *P. amœna* (*ante*, p. 405), both in general form, size and punctate striation of the elytra; after a careful examination I am persuaded that it represents a separate and a new species: when viewed laterally it is decidedly less depressed, more globose; when viewed obliquely, a tubercular elevation near the shoulders stands out distinctly, and makes the

shoulders more prominent than in *P. amœna*. The outline also, from above, is somewhat different; in *P. amœna* it is broadly subcircular, in *P. captiosa* it is somewhat dilated behind the middle.

Champion Bay.

5. *Paropsis maculicollis*.

Rotundato-ovalis, punctato-striata, flava vel flavo-testacea: *caput* foveâ lineari ad apicem transversâ subsinuâtâ, crebrè punctatum, flavum, basi et maculis duabus juxta basin (aliquando confluentibus et basi connexis), etiamque interdum lineâ apicali, nigris; *thorax* latitudine duplo longitudinem superans, angulis posticis rotundatis, anticis haud prominulis, margine apicali valde emarginato et sinuato; punctatus (punctis crebris minutis et inæqualibus, latera versus magnis et confertis), flavus, maculis quibusdam in formâ literæ W ordinatis (interdum conjunctis, interdum insulatis, et in numero circa decem); *scutellum* subtriangulare, minutissime punctatum, nigro-fuscum; *elytra* brevía, lata, striato-punctata, flava vel fusco-flava, punctis minutis raris nigris ordinatis sed intervallis inæqualibus dispositis, interstitia etiam evidenter punctata; *corpus subtus* rufo-testaceum; *pedes* testacei, genibus fuscis; *antennæ* flavæ, apicibus fusco-adumbratis.

Long. corp. lin.  $2\frac{1}{2}$ ; lat. lin. 2.

A well-defined little species, notable by its thoracic maculations, and the minute black and sparingly-distributed punctures of its elytra.

6. *Paropsis purpureo-aurea*.

Rotundato-ovalis, satis depressa, punctato-striata; dum viva, purpureo-aurea, mortua et desiccata, flavo-testacea, fusco-maculata: *caput* lineâ anticè sinuato-transversâ, punctatum, flavum; *thorax* transversus, latitudine haud elytra sed longitudinem ipsius plus duplo superans, lateribus rotundatis, angulis posticis rotundatis, anticis haud prominulis, crebre punctatus, punctis in disco minutis inæqualibus, ad latera confertis et majoribus; quoad colorem flavus, disco medio confusè fusco-ornato; *scutellum* subcordiforme, impunctatum; *elytra* satis lata, marginibus ampliatis, striato-punctata, punctis minutis confertis et æqualiter ordinatis, interstitia etiam punctis crebris ornata; quoad colorem obscurè notata, flavo-testacea, utrinque circulo magno scutellari, alteroque

apicali subelongato maximo, maculâ etiam laterali antemediâ elongatâ; *corpus subtus* flavum; *pedes et antennæ* pallide flavi.

Long. corp. lin.  $3\frac{1}{2}$ ; lat. lin.  $2\frac{3}{4}$ .

Mr. Du Boulay says that the example from which this description is taken was, when alive, inconceivably brilliant and lovely; it was one single gem of bright metallic purple and burnished gold, and so attractive that he carried it for some days in his handkerchief in the bush; at last it died, he looked for it but could not find it, and only saw, to his utter bewilderment, in its place an obscure-looking flavous insect, as it presents itself to me. According to his description (which accords exactly with the present markings), the elytra are golden, with a broad well-formed ring of brilliant purple (extending over half the breadth of the elytra) on either side near the scutellum, and another oblong ring which occupies the whole apical part of the elytra; between the two rings, near the side, is a third longitudinal purple marking; the margins of the elytra are broadly and palely golden; the thorax is golden, with a magnificent centre-piece of purple.

I have had much pleasure in receiving a kind offer from Mr. Du Boulay, that on his return to his Australian home he will prepare *coloured drawings* of species of this genus when in a living state, and forward them to me, together with the specimens from which the drawings were made. In this way, and it appears to me in this way only, can we make our descriptions of this genus of value to Australian Entomologists.

Champion Bay.

#### 7. *Paropsis tessellata*.

Ovata, satis rotundata, vix depressa, punctato-striata; exempli mortui et desiccati corpus subtus, pedes, et antennæ rufo-flavi, elytra pallide testacea, fusco-maculata: *caput* antice lineâ obsoletâ juxta epistoma curvatâ, leviter punctatum, rufo-flavum; *thorax* longitudine latitudinem vix triplo superans, lateribus rotundatis et satis ampliatis, margine antico lato valdè emarginato, angulis anticis subprominulis, sparsim punctulatus, rufo-flavus, maculis utrinque in medium (vel maculâ transversâ adumbratâ indeterminatâ) fuscis; *scutellum* triangulare, læve (rarissime punctatum), flavo-fuscum; *elytra* brevia, longitudine amplitudinem superantia, punctato-striata, punctis æqualibus sed inæqualiter distributis, pallidè fusca, maculis 20—30 quadratis in singulo elythro pallidè



testaceis; *corpus subtus* pallidè flavum; *pedes* flavi, genubus et femoribus supra fusco-adumbratis; *antennæ* rufo-flavæ.

Long. corp. lin.  $3\frac{1}{2}$ ; lat. lin.  $2\frac{1}{2}$ .

*P. tessellata* is conspicuous among other species by the peculiar tessellated pattern of its elytra; frequently the closely arranged order of punctures is interrupted, in each interruption appears a rectangular flavous marking, in the centre of which is a single puncture; the ordinary punctures are black on a fuscous ground, the isolated punctures are fulvous on a flavous ground.

I have received two examples of this species from Mr. Du Boulay, one of which is in Mr. Baly's cabinet, the other in my own.

#### 8. *Paropsis nigroconspersa.*

Late ovata, subrotundata, vix depressa, rufo-testacea, nigro-maculata et conspersa: *caput* sparsim punctatum; *thorax* transversus, margine posteriori subrotundato in medio ampliato, lateribus paulum rotundatis et caput versus compressis, angulis anticis obtusis, posticis modice rotundatis; sparsim punctatus, lateribus punctis crebrius ornatis; *scutellum* triangulare, impunctatum, nitidum; *elytra* satis breviter et rotundata, striato-punctata, punctis profundis modicis ordinatis, versus latera media autem confusis, plerumque nigris; maculæ etiam nigræ post-mediæ longitudinales suturales elytra ornant; macula inter strias 1 et 2 post scutellum, elongata; inter strias 3 et 4 major, interstitium totum ad medium elytri occupans; inter strias 4 et 5 series macularum minorum, et inde ad latera minores inordinatæ plus minus distributæ; apicem versus majores et plus confertæ, ad humeros quoque (ad strias 7 et 8) macula major insulata; *corpus subtus*, *pedes* et *antennæ* rufo-flavi.

Long. corp. lin.  $3-2\frac{3}{4}$ ; lat. lin. 2.

Two specimens are before me, which differ but slightly the one from the other. The species may be recognized among its punctate-striate congeners by the double lines of elongate markings near the suture, and the lateral more irregular and insular markings.

I received both specimens, ♂ and ♀, from Mr. Du Boulay, from Champion Bay.

#### 9. *Paropsis sanguineotincta.*

E minoribus, ovalis, subparallela, ad apicem attenuata, striato-punctata, rufo-testacea, nigro-vittata, medio sanguineo-tincta:

*caput* supra labrum transversè arcuatè foveolatum, crebrè punctatum, ad basin nigro-marginatum; *thorax* transversus, lateribus rotundatis juxta angulos anticos vix rotundatos subcompressis, angulis posticis obtusis; crebrè et minutè punctatus, punctis ad latera fortioribus; *scutellum* subcordiforme, impunctatum, rufo-testaceum; *elytra* satis parallela, thorace paulum latiora, apicem versus attenuatiora, utrinque striis 10 punctorum ornata, punctis confertis et ordinatis, interstitia minutissimè punctata; in elytro singulo sutura et vittæ quatuor interruptæ nigræ; prima scutellaris, brevis, inter strias 2 et 3; secunda inter strias 4 et 5, apicem attingens, sed in medium interrupta; tertia brevis, juxta apicem apud striam 7; quarta marginalis, sed longo intervallo a margine separata, apud striam 9, et humeros et apicem penitus attingens, sed in medio interrupta; striæ 2, 3 et 4 juxta apicem sese attingunt; in medio elytrorum utrinque macula magna roseo- vel sanguineo-tincta; *pedes*, *corpus subtus* et *antennæ* rufo-flavi.

Long. corp. lin.  $2\frac{1}{3}$ ; lat. lin.  $1\frac{1}{2}$ .

A lovely little species, marked with four interrupted but bold vittæ of black, and having in the middle of each elytron an indeterminate marking of bright rufous.

Champion Bay.

#### 10. *Paropsis transversomaculata*.

E minoribus, depressa, late ovalis, marginata, striato-punctata, flava, maculis nigris ornata: *caput* inæqualiter punctatum, flavum, labro rufo-tincto, basi maculis duabus magnis nigro-rufis ornatâ; *thorax* latitudine plus duplo longitudinem excellens, angulis posticis et anticis obtusis, emarginatione anteriori profundâ, haud circulari sed utrinque obtusè angulatâ; crebrè confusè et inæqualiter punctatus, punctis ad latera confertis et majoribus, flavus, maculâ utrinque insulatâ magnâ dilutâ rufo-fuscâ, marginibusque tenuiter rufo-coloratis; *scutellum* elongato-triangulare, impunctatum, rufo-fuscum; *elytra* lata, ovata, post medium latiora, apice rotundata, depressa, late marginata, striato-punctata, punctis æqualibus ordinatis nigris, interstitiis etiam subtiliter punctatis; margo latus, planus, punctis sparsis confusis ad latera ornatus; *elytra* flava, macularum serie lunatâ transversâ medianâ, alterâque apicali; mediana e maculis tribus penitus confluentibus vix striam lateralem attingentibus constat, series postica ad striam 9 extendit; macula utrin-

que exterior major et latior, et apud humeros quoque macula insulata nigra; *corpus subtus* nigrum; *pedes et antennæ* rufo-flavi.

Long. corp. lin.  $2\frac{1}{4}$ ; lat. lin.  $1\frac{2}{3}$ .

This species may be recognized by its depressed and broadly ovate form, the markings on its head and thorax, and the two sub-circular transverse rows of fuscous markings on the elytra.

A single example in my collection is from Champion Bay.

#### 11. *Paropsis intertineta*.

Late ovalis, subdepressa, punctato-striata, rufo-flava, maculis nigris ornata: *caput* minutè punctatum, labro ad medium nigro-notato, basi nigrum; *thorax* transversus, latitudine longitudinis duplum æquante, angulis anticis rotundatis, posticis obtusis; crebrè et minutè punctatus, punctis apud latera majoribus et confertis; *scutellum* triangulare, impunctatum, fuscum; *elytra* rotundata, subdepressa, post medium latiora, punctato-striata, punctis minutis confertis, interstitiis minutè punctatis; rufo-flava, maculis nigris ornata, serie subcirculari circa scutellum, alterâque post medium circa apicem (interdum penitus obliteratedâ), maculâ etiam longitudinali laterali ante medium: *antennæ, corpus subtus, et pedes* rufo-flavi.

Long. corp. lin.  $2\frac{1}{4}$ ; lat. lin.  $1\frac{3}{4}$ .

*P. intertineta* is allied to *P. transversomaculata*, but abundantly distinct; the punctures of the elytra are much more minute, and the maculation of the elytra is entirely different. In the species before us the medial subtransverse row of maculations is inflected towards the apex; in *P. transversomaculata* it is inflected towards the base.

Champion Bay.

#### 12. *Paropsis nigrifula*.

E minimis, depressa, late ovalis, striato-punctata, rufo-flava, elytris nigris: *caput* sparsim punctatum, flavum, labro ad medium fuscato; *thorax* transversus, latitudine longitudinem plus duplo superante, lateribus subrotundatis et marginatis, angulis anticis obtusis, posticis subrotundatis; minutè punctatus, fortius ad latera, flavus, margine antico fuscato; *scutellum* subtriangulare, læve, nigrum; *elytra* lata, depressa, striato-punctata, interstitiis subtilissime punctatis; *antennæ*

flavo-testaceæ; *pedes* testacei; *corpus subtus* nigrum, abdomine fuscato.

Long. corp. lin.  $1\frac{1}{2}$ ; lat. lin. 1.

Notable by its minute size, its depressed form, and its black punctate-striate elytra.

### 13. *Paropsis nigropicta*.

Rotundato-ovalis, subtiliter punctata, rufo-sanguinea, nigro-maculata: *caput* punctatum, rufum, labro et basi (oculos ad latera amplectenti) nigris; *thorax* transversus, valde declivis, basi superne visâ transversâ, lateribus subrotundatis, angulis vix acutis, margine anteriori valde sinuato-emarginato; punctatus, punctis inæqualibus minutis crebris, rufo-sanguineus, maculâ utrinque nigrâ circulari insulatâ magnâ ornatus; *scutellum* magnum, triangulare, læve, nigrum; *elytra* rotundata, brevia, pone medium sub-ampliata, punctata, punctis confertis inæqualibus vix ordine dispositis, rufo-sanguinea nigro-maculata, maculis quatuor, 1<sup>a</sup> ante-laterali subtriangulari vel subcirculari plerumque insulata, 2<sup>da</sup> scutellari circulari magnâ margines basalem et suturalem attingenti et maculam rufam intra sese amplectenti, 3<sup>a</sup> post-mediâ transversâ inæquali interdum in maculis duabus divisa, 4<sup>ta</sup> apicali ad suturam etiamque ad marginem hemi-elytrorum extendenti; *antennæ* rufæ; *corpus subtus* nigrum, abdomine rufo-marginato; *pedes* rufi, femoribus nigro-ornatis.

Long. corp. lin.  $2\frac{1}{5}$ ; lat. lin.  $1\frac{3}{4}$ .

The four examples before me vary but little from each other either in size or degree of coloration; the insect is quite distinct from other known species of the group.

### 14. *Paropsis incurva*.

Late ovalis, globosa, elytris transversè visis subgibbosis, fusco-rufa: *caput* antice utrinque transversè foveolatum, crebrè et leviter punctatum; *thorax* longitudinem latitudine triplo superans, angulis anticis breviter rotundatis, posticis late rotundatis, punctatus, punctis sat minutis et crebris, apud latera fortioribus; *scutellum* triangulare, levissime punctatum; *elytra* lata, globosa, marginibus paulum ampliatis, striato-punctata, punctis brevibus inæqualibus, inæqualiter subordinatis, interdum etiam confusis interdum obsoletis, ad margines paulum majoribus et rarius distributis,

elytra quoque leviter et crebrè verrucosa et transversim rugosa, rugis omni parte dispartitis; *corpus subtus* rufo-ferrugineum, metasterno medio fusco-adumbrato; *pedes* et *antennæ* rufo-flavi.

Long. corp. lin.  $3\frac{1}{2}$ ; lat. lin. 3.

This species may be recognized from other species with verrucose elytra, by the gibbous form of the medial elytra when seen sideways, and by the comparatively undeveloped and generally distributed rugosities on the surface of the elytra.

Champion Bay.

15. *Paropsis perparvula.*

Late ovalis, subcircularis, convexa, subtuberculata, confusè punctata, rubiginosa: *caput* crebrè punctatum, spatio basali brevi lævi; *thorax* transversus, latitudine longitudinem triplo superans, crebrè et satis fortiter punctatus, angulis anticis distinctis, posticis rotundatis, lateribus etiam rotundatis; *scutellum* late triangulare, læve, rufo-flavum, marginibus rufo-fuscis; *elytra* satis convexa, rotundata, confusè et crebrè punctata, punctis versus suturam et apicem seriebus ordinatis; tubercula etiam rarius apparent, inæqualia plerumque insulata juxta suturam apicalem penitus ordinata; *corpus subtus* et *antennæ* flavo-fuscæ; *pedes* flavo-rufi.

Long. corp. lin.  $2\frac{1}{3}$ ; lat. lin. 2.

*P. perparvula*, though belonging to the very difficult and extensive sub-group of tuberculated species, is, I believe, easily to be recognized—at all events it abundantly differs from all Western Australian species with which I am acquainted. I have several species in my Collection, received for the most part from M. Damel, from the North and North-West districts: the species before us may be recognized easily among them all by its small size, the close irregular punctuation of the elytra, which becomes near the apical suture arranged in striæ, and by the absence of any dark fuscous spots on the elytra.

Champion Bay.

16. *Paropsis nervosa.*

Late ovalis, vix gibbosa, vibicibus transversis apud elytra ornata, punctata, rufo-castanea: *caput* apud labrum foveâ lineari subtransversâ ornatum, inæqualiter rugosum, plagâ circulari utrinque mediâ subdepressâ nigrâ, labro etiam ad

medium nigro; *thorax* longitudinem latitudine triplo superans, angulis anticis rotundato-obtusis et prominulis, posticis rotundatis, lateribus rotundatis et tenuiter marginatis, margine anteriore latè emarginato; ad medium carina obsoleta longitudinalis; punctatus et vermiculariter subrugosus, maculâ utrinque magnâ nigrâ penitus quadratâ inter medium et marginem, et in his maculis rugis fortioribus et distinctis; *scutellum* triangulare, punctatum; *elytra* satis gibbosa, post medium paulum ampliata, marginibus extensis, apice vix rotundato sed paululum producto; fortiter et crebrè punctata, punctis nigro-fuscis, apud humeros utrinque tuberculo unico paulum elevata, ad latera et ad medium vibicibus interruptis 2 vel 3 ornata, etiamque tuberculis vix crebris apud apicem sed juxta suturam post-medium crebrioribus et seriebus 2 ordinatis; quoad colorem rufo-castanea, maculâ fuscâ magnâ indeterminatâ ad scutellum, alterâ in tuberculum humerale, iterumque vittâ subobsoletâ rufo-fuscâ a humeris ad apicem continuatâ; *corporis subtus* prothorax flavus, metathorax rufo-flavus nigro-tinctus, abdomen crebrè punctatum, rufum; *antennæ* rufo-flavæ; *pedes* flavo-testacei.

Long. corp. lin.  $2\frac{3}{4}$ ; lat. lin.  $2\frac{1}{2}$ .

*P. nervosa* may be distinguished by its strongly punctate elytra, which are marked by a single medial transverse raised band, and one or two others, smaller and more interrupted, nearer the apex; the almost quadrate (not circular) markings of the thorax, and the rufo-flavous markings on the elytra, amply distinguish it from allied species.

#### 17. *Paropsis verrucipennis*.

Late ovalis, gibbosa, verrucis et quasi vibicibus transversis ornata, rufo-castanea, nigro-maculata: *caput* crebrè punctatum, rufo-castaneum, labro ad medium nigro-notato; *thorax* triplo longitudinem latitudine superans, angulis posticis rotundatis, anticis obtusis, lateribus rotundatis; crebrè punctatus, punctis confusis inæqualibus ad latera magnis; rufo-castaneus, utrinque ad latus maculâ circulari magnâ; *scutellum* subcordiforme, ad medium subdepressum, minute punctatum; *elytra* gibbosa, infra scutellum rotundato-elevata, marginibus post medium paulum ampliatis, apice rotundato; verrucis inæqualibus post medium seriebus ordinatis tecta,

ad latera notis transversis elevatis inæqualibus 1 vel 2 vel 3 ornata; *pedes* rufo-flavi; *corpus subtus* et *antennæ* rufo-fuscæ. Long. corp. lin. 3; lat. lin.  $2\frac{1}{2}$ .

The group of species of this genus that has the elytra of a rufo-ferruginous colour and adorned with tubercular elevations, either in the form of isolated warts or transverse weals, is very numerous, and the species in some instances are both closely allied and subject to variation of sculpture. The species before us however presents no difficulty of definition; it is in form very gibbous; behind the scutellum the whole of the elytra, when viewed laterally, is raised into a hump-like elevation; their surface is covered with warty elevations, arranged near the apex in irregular striæ, and near the sides interrupted by and changed into transverse elevated ridges, more or less clearly defined; the broad circular lateral markings of the thorax also render this species conspicuous among its congeners.

Genus *CHALCOLAMPRA*, Blanch.

1. *Chalcolampra undulatipennis*.

Oblongo-ovalis, subparallela, æneo-metallescens, elytris punctis etiamque tuberculis obsolete ornatis; *caput* inter oculos transversè subdepressum, ad margines oculorum crebrè et fortiter punctatum, juxta labrum utrinque oblique et breviter foveolatum (fovæ margine impunctato), versus basin leviter et sparsim punctatum; *thorax* magnus, transversus, latitudine elytra æquans, declivis, lateribus leviter rotundatis, margine anteriori fortiter emarginato, basali transverso recto; utrinque leviter apud margines depressus, et sparsim sed fortiter punctatus, apud discum rarissime punctis magnis sed crebrè minutissimis ornatus; *scutellum* transversotriangulare, impunctatum, læve, nitidum; *elytra* parallela, versus apicem subattenuata, etiamque declivia, punctis raris satis magnis ordinatis, etiam quasi tuberculis subelevatis ornata, ordinibus quinque dispositis; *corpus subtus* rufo-æneum, abdomen autem nigrum, segmento apicali in medio fortiter impresso; *pedes* nigro-æneo metallici, genibus tarsisque rufo-metallescentibus; *antennæ* rufo-fuscæ.

Long. corp. lin. 4; lat. lin.  $2\frac{1}{3}$ .

Very nearly allied to *Chalcolampra verrucosa*, Clark (Journ. Entom. ii. 250), but broader, of a more decided green metallic

colour, and with the elevations on the elytra much less distinctly expressed.

I have received a single specimen of this species from Swan River.

2. *Chalcolampra laticollis*.

Oblongo-ovata, subparallela, æneo-nigra, striato-punctata: *caput* leviter et sparsim punctatum, punctis ad apicem et juxta oculos crebrius instructis, labro rufo-ferrugineo; *thorax* latitudine longitudinem duplo superans et elytra æquans, lateribus ampliatis et rotundatis, sparsim punctatus, punctis apud latera majoribus et crebris; *scutellum* triangulare, impunctatum; *elytra* parallela, apice declivia, striato-punctata, punctis minutis confertis et plerumque ordinatis, striis ipsis versus medium obsolete; *corpus subtus* rufo-fuscum; *pedes* rufo-flavi; *antennæ* pallide rufæ.

Long. corp. lin. 4; lat. lin. 2.

This species resembles *Australica irrorata*, Baly; the thorax has its sides more rounded in front; the head and thorax are much more punctate; and the stripe-like punctures of the elytra are more evenly arranged and less crowded.

Champion Bay.

Genus AUSTRALICA, Chevr.

1. *Australica æneonitens*.

Elongato-ovalis, satis parallela, crebrè punctata, thorace fusco-æneo vel viridi-æneo, elytris viridi-æneis: *caput* fortiter et crebrè punctatum, fusco-nigrum, labro rufo-flavo; *thorax* transversus, lateribus ampliato-rotundatis, punctatus, punctis satis crebris juxta latera confertis; *scutellum* subtriangulare, impunctatum, læve; *elytra* parallela, punctata, punctis crebris et satis magnis juxta suturam seriebus 2 vel 3 inordinatis dispositis, alibi confusis; *corpus subtus* æneo-nigrum; *pedes* rufi, genibus fuscis; *antennæ* rufæ.

Long. corp. lin.  $2\frac{1}{4}$ ; lat. lin. 1.

This pretty little species is quite distinct from its congeners, and may at once be recognized by its bright blue colour: it will by reason of its parallel form be placed near to *A. Waterhousii*, Baly, (Trans. Ent. Soc. 3rd ser. i. 620.)

Champion Bay.

In Mr. Baly's collection, and also in my own.



Genus CHALCOMELA, Baly.

1. *Chalcomela subpunctata.*

*C. pilulæ* (Clark, Journ. Entom. ii. 251) affinis; fere rotundata, æneo-nigra, subtiliter punctata: *caput* foveâ lineari minutâ subtransversâ alterâque longitudinali versus apicem, subtiliter et creberrimè punctatum, labro rufo-flavo; *thorax* ut in *C. pilulâ* sed crebrius subpunctatus; *scutellum* late triangulare, impunctatum, nitidum; *elytra* rotundata, striatopunctata, punctis haud ut in *C. pilulâ* magnis et inæqualibus sed minutis confertis et ordinatis, interstitia subtiliter punctata etiamque subtilissimè rugosa; *corpus subtus*, *pedes* et *antennæ* nigro-ænei.

Long. corp. lin.  $2\frac{1}{2}$ ; lat. lin.  $2\frac{1}{5}$ .

This species may readily be separated from *C. pilula* by its more regular stripe-like punctures on the elytra; the punctures are smaller and more closely arranged: it differs also in the minute thread-like fovea on the head.

Champion Bay.

Fam. EUMOLPIDÆ.

Genus GELOPTERA, Baly, Journ. Entom. i. 283.

1. *Geloptera Duboulaii.*

Oblonga, convexa, parallela, punctata vel reticulata, plerumque metallico-violacea: *caput* in medio foveolatum, fortiter punctatum, violaceum; *thorax* transversus, lateribus antice constrictis et depressis, marginatis et dentibus obsoletis 3 vel 4 armatis, margine basali subsinuato et in medium marginato; confusè confertim et inæqualiter punctatus; *scutellum* subcirculare, impunctatum, viride; *elytra* versus apicem striis 2 vel 3 utrinque brevibus ornata, interstitiis elevatis, disco transversè et fortiter reticulato; metallico-violacea, marginibus tenuiter viridibus; *corpus subtus* viride, abdomine fusco; *pedes* rufo-metallici; *antennæ* rufæ.

Long. corp. lin. 4; lat. lin.  $2\frac{3}{4}$ .

This species, which I name in honour of its captor, is entirely different from the other two species of the genus, *G. tuberculata* and *G. geniculata*, both of which, found at Swan River, are common in collections.

In the collection of Mr. Baly, as well as in my own.

2. *Gelopectera nodosa*.

Subelongata, obscurè cuprea, confusè punctata, nodis ornata: *caput* labro nigro, punctatissimum, vel nigro-cupreum vel nigrum; *thorax* vix transversus, angulis anticis compressis, fortiter et rugosè punctatus, nodis 4 in medio instructus; *scutellum* transversè subcirculare; *elytra* satis elongata, apice attenuata, fortiter et confertim punctata, obsolete tuberculata, tuberculis plerumque insulatis; *corpus subtus* nigro-fuscum, abdomine pube adpressâ pallidâ oblecto; *pedes* rufo-fusci; *antennæ* nigro-fuscae.

Long. corp. lin. 3—2 $\frac{1}{3}$ ; lat. lin. 1 $\frac{1}{2}$ —1 $\frac{1}{4}$ .

In appearance this species approaches *G. tuberculata*, but is much smaller and more parallel: it is more elongate than *G. geniculata*.

In the collection of Mr. Baly, and also in my own.

## Genus THAUMASTOMERUS.

Genus novum ex *Eumolpidis*, late ovatum. *Caput* verticale, antice subproductum. *Palpi* articulo ultimo turgido, incrassato, haud ut plerumque in genere *Edusâ* subelongato. *Antennæ* filiformes, elongatæ, tenues. *Thorax* transversus, angulis anticis valde depressis et acutis, marginibus lateralibus subrotundatis, anteriori emarginato, posteriori sinuato. *Scutellum* quadratum, apice obtuso. *Elytra* lata, thorace paulum latiora, posticè subattenuata, punctata, nitida. *Abdomen* segmento penultimo tertio latiore. *Femora* antica robusta, margine inferiori ad medium angulato; media valde incrassata, brevia, arcuata (latitudo media penitus tertiam partem longitudinis æquat); postica attenuata, ad medium subglobosa. *Tibiæ* anticæ ad basin leviter incurvatæ, versus apicem latiores, margine juxta apicem obtusè angulato; mediæ breves, robustæ, inflectæ, subcylindricæ; posticæ elongatæ, graciles. *Tarsi* antici et postici articulo basali lato et magno, secundo minuto triangulari, penultimo profunde bilobato, ultimo curvato; medii articulo basali secundum vix superante. *Unguiculi* limbi ambo robusti, hamis ipsis minutis valde incurvatis et brevibus.

The above diagnosis is taken from a single example of a most abnormal form of *Eumolpidæ*. Generally it resembles the species of *Edusa*, but is somewhat broader and less parallel; its striking peculiarity consists in the strange incrassation of its medial fe-

mora. I am told by its captor that the species jumps with strength and quickness.

I have, from the same collection, a single example of what I take to be the female of the same species, resembling the typical form in every particular except the incrassation of the femora.

1. *Thaumastomerus viridis.*

Late ovatus, postice subattenuatus, punctatus, viridi-metalliscus, nitidus: *caput* verticale, ad medium subdepressum, punctatum, labro rufo-fusco; *thorax* crebrè et inæqualiter punctatus; *scutellum* impunctatum; *elytra* lata, subdepressa, punctata, punctis apud latera penitus veluti in rugis transversè ordinatis; *corpus subtus* nigro-viride; *pedes* rufi; *antennæ* graciles, rufæ, articulis ultimis fuscatis.

Long. corp. lin. 3; lat. lin. 2.

Champion Bay. Taken by Mr. Du Boulay.

Genus EDUSA, Chevr.

1. *Edusa aureoviridis.*

Brevis, lata; *elytra* striato-punctata et transversè rugosa; sparsim albo-pubescentia, aureo-viridis: *caput* leviter punctatum; *thorax* transversus, angulis anticis depressis et acutis, fronte mediâ prominenti, angulis posticis breviter rotundatis, margine basali transversè sinuato, lateribus submarginatis, crebrè et leviter punctatus, ad latera rarius pubescens; *scutellum* latè cordiforme, subtilissimè punctatum; *elytra* brevia, robusta, apice paulum elongata, striato-punctata, transversè rugosa, rugis minutis confertis versus suturam evidentioribus; *lævia*, nitida, versus apicem subtiliter pubescentia; *corpus subtus* nigrum; *pedes* et *antennæ* rufi.

Long. corp. lin.  $2\frac{1}{2}$ ; lat. lin.  $1\frac{1}{2}$ .

2. *Edusa setosa.*

Robusta, punctata, æneo-nigra, pube albidâ oblecta: *caput* apud labrum utrinque breviter et oblique foveolatum, punctatum, basi sparsim pubescente, labro rufo; *thorax* transversus, margine basali arcuato, minutè punctatus, pube tenui albidâ vel omnino vel sparsim tectus; *scutellum* quadratum, apice rotundato, leviter punctatum; *elytra* robusta, punctata, punctis crebris indistinctis et confusis, transversè rugosa, rugis minutis juxta suturam et basin evidentioribus, pube albidâ adpressâ lævi oblecta; *corpus subtus* nigrum,

testaceo-pubescent; *pedes* rufi, *antennæ* rufæ, articulis ad bases fusco-adumbratis.

Long. corp. lin.  $2\frac{1}{2}$ ; lat. lin.  $1\frac{1}{2}$ .

### 3. *Edusa hispidula*.

Robusta, subtiliter punctata, nigra, pube crassâ ornata vel oblecta: *caput* pube pallidâ omnino oblectum, labro testaceo; *thorax* transversus, omnino albido-pubescent (pube vix ut in *E. setosâ* tenui sed spissâ crassâ et adpressâ), infra pubem aureo-metallicus vel nigro-aureus, haud niger; *scutellum* quadratum, apice rotundato, leviter punctatum; ut *thorax*, pubescent; *elytra* robusta, levissime punctata, in exemplo unico pube crassâ ad apicem et præsertim ad basin penitus oblecta, in exemplis integris sine dubio omnino oblecta; *corpus subtus* fuscum, sed pube albidâ tenui frequenti oblectum; *antennæ* et *pedes* rufi.

Long. corp. lin.  $2\frac{1}{2}$ ; lat. lin.  $1\frac{1}{2}$ .

### 4. *Edusa nigro-ænea*.

Robusta, transversè rugosa, pallidè pubescent, nigro-ænea; *caput* punctatum, subtiliter pubescent, labro rufo-fusco; *thorax* transversus, angulis anticis valde depressis, margine basali sinuato et leviter marginato, crebrè et inæqualiter punctatus, ad latera sparsim pubescent; *scutellum* quadratum, apice late rotundato, impunctatum; *elytra* lata, paulum thorace latiora, transversim rugosa, rugis minutis inæqualibus juxta suturam evidentioribus; versus latera et apicem sparsim pubescentia; *corpus subtus* impubescent, nigrum; *pedes* rufi; *antennæ* rufæ, articulis apud bases nigro-fuscatis.

Long. corp. lin. 3; lat. lin.  $1\frac{2}{3}$ .

## Genus OCNUS.

Genus novum ex *Eumolpidis*, elongatum, parallelum, satis depressum, metallicum. *Caput* haud verticale, penitus porrectum, labri margine anteriori emarginato, haud ut in genere *Edusâ* subrotundato vel transverso. *Thorax* quadratus, angulis anticis depressis et penitus rotundatis, margine postico sinuato. *Scutellum* quadratum, apice transversè obtuso. *Elytra* parallela, thorace paulum latiora, apice declivia. *Antennæ* filiformes, graciles, versus apicem paulum incrassatæ. *Pedes* plerumque ut in genere *Edusâ*.

This genus is based upon examples which are imperfect ; it is, however, abundantly different from *Edusa* in its much more parallel, less robust, and more elongate form, in the less manifest inclination of the thorax, and in its more porrect head, and distinctly emarginate labrum.

1. *Ocnus viridis.*

Rugosus, viridis, pedibus rufis: *caput* punctatum, labro lævi rufo ; *thorax* quadratus, fortiter punctatus ; *scutellum* leviter punctis ad apicem ornatum ; *elytra* parallela, depressa, transversè rugosa et punctata, rugis apud medium distinctis versus apicem obsoletis ; *antennæ* pallide rufæ, apicibus fuscis ; *corpus* subtus nigrum, abdomine nigro-viridi ; *pedes* rufi.

Long. corp. lin. 3 ; lat. lin.  $1\frac{1}{4}$ .